## **ANTIMICROBIAL FORMED PAPER**

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Inventor:

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Applicant:

TOYOBO CO LTD

Classification:

- international:

D21H13/24; A01N25/34; A01N57/14; D01F6/92;

D21H21/36

- european:

Application number: JP19990056263 19990303

Priority number(s):

## Abstract of JP2000248488

PROBLEM TO BE SOLVED: To obtain an inexpensive antimicrobial formed paper excellent in antimicrobial properties and durability by adding a specific phosphorous ester compound to a polyester resin, spinning the obtained polyester resin to provide a polyester-based antimicrobial staple fiber and subjecting the obtained staple fiber to papermaking.

SOLUTION: This antimicrobial formed paper is obtained by mixing 0.005-10 wt.% one or more kinds of phosphorous ester compounds of the formula [R1 is a 4-12C (cyclo)alkyl or an arylalkyl; R2 is H, a 1-12C (cyclo)alkyl or an arylalkyl; R3 is H, a 1-12C (cyclo)alkyl, an arylalkyl or the like; R4 and R5 are each a 1-8C alkyl or a hydroxy-substituted 1-4C alkyl or the like] with a polyester resin, melt-spinning the obtained mixture to provide a polyester-based antimicrobial staple fiber having 0.2-6, preferably 1-3 de size and 2-100, preferably 5-20 mm length, and subjecting the obtained staple fiber to papermaking.

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15. Antibacterial polyester paper making

**CAS SECTION-143** 

CAS SUBSECTION- 007

CAS 133-16 133-224477 133:224477 NDN- 213-0409-2810-9

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PATENT TYPE- Jpn. Kokai Tokkyo Koho

PATENT ASSIGNEE(S)- Toyobo Co., Ltd.

INTERNATIONAL PATENT CLASS- D21H0132400; A01N0253400; A01N0571400;

D01F0069200; D21H0213600

**SUBFILE CODE- MAC** 

LANGUAGE- Japan

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**NO-ABSTRACT** 

**IDENTIFIER(S)**- antibacterial PET paper substitute; phosphite antibacterial agent polyester paper substitute

CAS REGISTRY/EC NUMBER(S)- 25038-59-9 HEADING PARENT- Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl)

CAS REGISTRY/EC NUMBER(S)- 26741-53-7 HEADING PARENT- 2,4,8,10-Tetraoxa-3,9-diphosphaspiroÝ5.5"undecane --3,9-bisÝ2,4-bis(1,1-dimethylethyl)phenoxy"-

CAS REGISTRY/EC NUMBER(S)- 80693-00-1 HEADING PARENT- 2,4,8,10-Tetraoxa-3,9-diphosphaspiroÝ5.5"undecane --3,9-bisÝ2,6-bis(1,1-dimethylethyl)-4-methylphenoxy"-

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